

EXPRESS MAIL - MAIL LABEL NO: EL274019027US

DATE OF DEPOSIT: June 20, 2001

I hereby certify that this paper or fee is being deposited with the United States Postal Service Express Mail Post Office to Addressee service under 37 CFR §1.10 on the date indicated above and is addressed to: Box PATENT APPLICATION, Assistant Commissioner for Patents, Washington, D.C. 20231

John C. Smith, Registration No. 33,284

Printed name of person mailing paper or fee



Signature of person mailing paper or fee

INVENTOR: Michael Meade

**APPARATUS AND METHOD FOR DISPLAYING COMPONENT
COMBINATIONS IN ADVERTISING MEDIA**

BACKGROUND OF THE INVENTION

Technical Field

5 The present invention relates to methods of displaying combinations of garment components in advertising media. In particular, it relates to mechanical and/or electronic

display of components of garments which allows a customer to dynamically combine components together for the purpose of selecting color or material combinations.

Background Art

The use of multiple materials in garments, especially in hats or head wear, is widespread. In particular, it is fairly common for an individual to wear a baseball-type hat that has a cap portion that fits on the user's head, and a visor located on the front edge of the cap. Frequently, this type of cap is made with the cap fabricated from one color while the visor is fabricated from another. Likewise, the materials used to fabricate the cap does not have to be the same materials used to fabricate the visor.

Conventional catalogs used to select a particular type of hat either show the cap completed and the combinations available, or it leads the purchaser to understand that the purchaser can make their own cap and visor combination. When customers select a particular combination of cap and visor for purchase, whether they be merchants purchasing from a manufacturer or consumers purchasing from a retail store, the selection process typically involves reviewing a large catalog which has numerous combinations to choose from. While the catalog may have a substantial number of items, it is still very likely that a large number of desirable combinations of caps and visors which would appeal to a customer would not be shown in the catalog. Even if the specific types of caps and visors are shown, they are typically in the catalog where the purchaser would not see them in combination. Due to the size of the catalog, the selection task is generally cumbersome and inconvenient for the purchaser.

In most catalogs, the purchaser is informed that they are able to choose the shape, the type of material, the color, the rear closure, and any other type of options such as

braid or special visor. Unfortunately, while conventional catalogs may inform the purchaser that they can configure the hat to their own specifications, the catalog does not provide any convenient means for purchaser to see how a custom-made hat, which does not already appear in the catalog, will look as a completed unit. It would be desirable to 5 provide a purchaser with an easy and convenient method of comparing a large number of combinations without having the inconvenience and burden of using a large catalog.

In addition to the issue of inconvenience, discussed above, prior art catalog systems also have another disadvantage in that they are generally very costly. In order to provide a large selection, the catalog must be a substantial document which is expensive 10 to produce. It would be desirable to have a small catalog which is easy to handle and manipulate, but would at the same time provide a large number of combinations for the customer to consider.

Catalog systems also have the disadvantage of being difficult and costly to change. In the event that one or more new styles are produced, the entire catalog may have to be reproduced to accommodate their inclusion. It would be desirable to have method of 15 making minor changes to a catalog without replacing the entire catalog.

With the advent of e-commerce, many types of retailing and sales techniques, such as the use of catalogs, have been adapted for use on the Internet. Unfortunately, voluminous amounts of information, such as that found in catalogs, would be unwieldy in 20 an environment where substantial amounts of data must be transferred via telephone lines in order to present an image of the catalog on a computer screen. It would be desirable to have a method of downloading catalog data to a computer such that large combinations of caps and visors can be displayed on the computer without requiring large data transfers.

While addressing the basic desirability of providing customers with the means to select from a variety of choices, the prior art has failed to provide a method in which the customer can be presented with a large number of choices from a small sample set, in which the customer can use a physically small and convenient catalog, which is
5 inexpensive to manufacture and/or modify, and which can be implemented on a computer such that small data transfers will provide a customer with a wide selection of choices.

SUMMARY OF THE INVENTION

The present invention solves the foregoing problems by providing a template system in which visor image templates are used in conjunction with catalog pages showing images of caps. The visor images are arranged on the periphery of a template which the customer moves in relation to the page containing cap images such that the visor images are moved from one cap image to another. The customer moves the images in this manner until the most desirable combination of caps and visors is determined. The page holding the visor images can optionally be a single strip that is smaller than the page holding the cap images.
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100
105
110
115
120
125
130
135
140
145
150
155
160
165
170
175
180
185
190
195
200
205
210
215
220
225
230
235
240
245
250
255
260
265
270
275
280
285
290
295
300
305
310
315
320
325
330
335
340
345
350
355
360
365
370
375
380
385
390
395
400
405
410
415
420
425
430
435
440
445
450
455
460
465
470
475
480
485
490
495
500
505
510
515
520
525
530
535
540
545
550
555
560
565
570
575
580
585
590
595
600
605
610
615
620
625
630
635
640
645
650
655
660
665
670
675
680
685
690
695
700
705
710
715
720
725
730
735
740
745
750
755
760
765
770
775
780
785
790
795
800
805
810
815
820
825
830
835
840
845
850
855
860
865
870
875
880
885
890
895
900
905
910
915
920
925
930
935
940
945
950
955
960
965
970
975
980
985
990
995
1000
1005
1010
1015
1020
1025
1030
1035
1040
1045
1050
1055
1060
1065
1070
1075
1080
1085
1090
1095
1100
1105
1110
1115
1120
1125
1130
1135
1140
1145
1150
1155
1160
1165
1170
1175
1180
1185
1190
1195
1200
1205
1210
1215
1220
1225
1230
1235
1240
1245
1250
1255
1260
1265
1270
1275
1280
1285
1290
1295
1300
1305
1310
1315
1320
1325
1330
1335
1340
1345
1350
1355
1360
1365
1370
1375
1380
1385
1390
1395
1400
1405
1410
1415
1420
1425
1430
1435
1440
1445
1450
1455
1460
1465
1470
1475
1480
1485
1490
1495
1500
1505
1510
1515
1520
1525
1530
1535
1540
1545
1550
1555
1560
1565
1570
1575
1580
1585
1590
1595
1600
1605
1610
1615
1620
1625
1630
1635
1640
1645
1650
1655
1660
1665
1670
1675
1680
1685
1690
1695
1700
1705
1710
1715
1720
1725
1730
1735
1740
1745
1750
1755
1760
1765
1770
1775
1780
1785
1790
1795
1800
1805
1810
1815
1820
1825
1830
1835
1840
1845
1850
1855
1860
1865
1870
1875
1880
1885
1890
1895
1900
1905
1910
1915
1920
1925
1930
1935
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
2060
2065
2070
2075
2080
2085
2090
2095
2100
2105
2110
2115
2120
2125
2130
2135
2140
2145
2150
2155
2160
2165
2170
2175
2180
2185
2190
2195
2200
2205
2210
2215
2220
2225
2230
2235
2240
2245
2250
2255
2260
2265
2270
2275
2280
2285
2290
2295
2300
2305
2310
2315
2320
2325
2330
2335
2340
2345
2350
2355
2360
2365
2370
2375
2380
2385
2390
2395
2400
2405
2410
2415
2420
2425
2430
2435
2440
2445
2450
2455
2460
2465
2470
2475
2480
2485
2490
2495
2500
2505
2510
2515
2520
2525
2530
2535
2540
2545
2550
2555
2560
2565
2570
2575
2580
2585
2590
2595
2600
2605
2610
2615
2620
2625
2630
2635
2640
2645
2650
2655
2660
2665
2670
2675
2680
2685
2690
2695
2700
2705
2710
2715
2720
2725
2730
2735
2740
2745
2750
2755
2760
2765
2770
2775
2780
2785
2790
2795
2800
2805
2810
2815
2820
2825
2830
2835
2840
2845
2850
2855
2860
2865
2870
2875
2880
2885
2890
2895
2900
2905
2910
2915
2920
2925
2930
2935
2940
2945
2950
2955
2960
2965
2970
2975
2980
2985
2990
2995
3000
3005
3010
3015
3020
3025
3030
3035
3040
3045
3050
3055
3060
3065
3070
3075
3080
3085
3090
3095
3100
3105
3110
3115
3120
3125
3130
3135
3140
3145
3150
3155
3160
3165
3170
3175
3180
3185
3190
3195
3200
3205
3210
3215
3220
3225
3230
3235
3240
3245
3250
3255
3260
3265
3270
3275
3280
3285
3290
3295
3300
3305
3310
3315
3320
3325
3330
3335
3340
3345
3350
3355
3360
3365
3370
3375
3380
3385
3390
3395
3400
3405
3410
3415
3420
3425
3430
3435
3440
3445
3450
3455
3460
3465
3470
3475
3480
3485
3490
3495
3500
3505
3510
3515
3520
3525
3530
3535
3540
3545
3550
3555
3560
3565
3570
3575
3580
3585
3590
3595
3600
3605
3610
3615
3620
3625
3630
3635
3640
3645
3650
3655
3660
3665
3670
3675
3680
3685
3690
3695
3700
3705
3710
3715
3720
3725
3730
3735
3740
3745
3750
3755
3760
3765
3770
3775
3780
3785
3790
3795
3800
3805
3810
3815
3820
3825
3830
3835
3840
3845
3850
3855
3860
3865
3870
3875
3880
3885
3890
3895
3900
3905
3910
3915
3920
3925
3930
3935
3940
3945
3950
3955
3960
3965
3970
3975
3980
3985
3990
3995
4000
4005
4010
4015
4020
4025
4030
4035
4040
4045
4050
4055
4060
4065
4070
4075
4080
4085
4090
4095
4100
4105
4110
4115
4120
4125
4130
4135
4140
4145
4150
4155
4160
4165
4170
4175
4180
4185
4190
4195
4200
4205
4210
4215
4220
4225
4230
4235
4240
4245
4250
4255
4260
4265
4270
4275
4280
4285
4290
4295
4300
4305
4310
4315
4320
4325
4330
4335
4340
4345
4350
4355
4360
4365
4370
4375
4380
4385
4390
4395
4400
4405
4410
4415
4420
4425
4430
4435
4440
4445
4450
4455
4460
4465
4470
4475
4480
4485
4490
4495
4500
4505
4510
4515
4520
4525
4530
4535
4540
4545
4550
4555
4560
4565
4570
4575
4580
4585
4590
4595
4600
4605
4610
4615
4620
4625
4630
4635
4640
4645
4650
4655
4660
4665
4670
4675
4680
4685
4690
4695
4700
4705
4710
4715
4720
4725
4730
4735
4740
4745
4750
4755
4760
4765
4770
4775
4780
4785
4790
4795
4800
4805
4810
4815
4820
4825
4830
4835
4840
4845
4850
4855
4860
4865
4870
4875
4880
4885
4890
4895
4900
4905
4910
4915
4920
4925
4930
4935
4940
4945
4950
4955
4960
4965
4970
4975
4980
4985
4990
4995
5000
5005
5010
5015
5020
5025
5030
5035
5040
5045
5050
5055
5060
5065
5070
5075
5080
5085
5090
5095
5100
5105
5110
5115
5120
5125
5130
5135
5140
5145
5150
5155
5160
5165
5170
5175
5180
5185
5190
5195
5200
5205
5210
5215
5220
5225
5230
5235
5240
5245
5250
5255
5260
5265
5270
5275
5280
5285
5290
5295
5300
5305
5310
5315
5320
5325
5330
5335
5340
5345
5350
5355
5360
5365
5370
5375
5380
5385
5390
5395
5400
5405
5410
5415
5420
5425
5430
5435
5440
5445
5450
5455
5460
5465
5470
5475
5480
5485
5490
5495
5500
5505
5510
5515
5520
5525
5530
5535
5540
5545
5550
5555
5560
5565
5570
5575
5580
5585
5590
5595
5600
5605
5610
5615
5620
5625
5630
5635
5640
5645
5650
5655
5660
5665
5670
5675
5680
5685
5690
5695
5700
5705
5710
5715
5720
5725
5730
5735
5740
5745
5750
5755
5760
5765
5770
5775
5780
5785
5790
5795
5800
5805
5810
5815
5820
5825
5830
5835
5840
5845
5850
5855
5860
5865
5870
5875
5880
5885
5890
5895
5900
5905
5910
5915
5920
5925
5930
5935
5940
5945
5950
5955
5960
5965
5970
5975
5980
5985
5990
5995
6000
6005
6010
6015
6020
6025
6030
6035
6040
6045
6050
6055
6060
6065
6070
6075
6080
6085
6090
6095
6100
6105
6110
6115
6120
6125
6130
6135
6140
6145
6150
6155
6160
6165
6170
6175
6180
6185
6190
6195
6200
6205
6210
6215
6220
6225
6230
6235
6240
6245
6250
6255
6260
6265
6270
6275
6280
6285
6290
6295
6300
6305
6310
6315
6320
6325
6330
6335
6340
6345
6350
6355
6360
6365
6370
6375
6380
6385
6390
6395
6400
6405
6410
6415
6420
6425
6430
6435
6440
6445
6450
6455
6460
6465
6470
6475
6480
6485
6490
6495
6500
6505
6510
6515
6520
6525
6530
6535
6540
6545
6550
6555
6560
6565
6570
6575
6580
6585
6590
6595
6600
6605
6610
6615
6620
6625
6630
6635
6640
6645
6650
6655
6660
6665
6670
6675
6680
6685
6690
6695
6700
6705
6710
6715
6720
6725
6730
6735
6740
6745
6750
6755
6760
6765
6770
6775
6780
6785
6790
6795
6800
6805
6810
6815
6820
6825
6830
6835
6840
6845
6850
6855
6860
6865
6870
6875
6880
6885
6890
6895
6900
6905
6910
6915
6920
6925
6930
6935
6940
6945
6950
6955
6960
6965
6970
6975
6980
6985
6990
6995
7000
7005
7010
7015
7020
7025
7030
7035
7040
7045
7050
7055
7060
7065
7070
7075
7080
7085
7090
7095
7100
7105
7110
7115
7120
7125
7130
7135
7140
7145
7150
7155
7160
7165
7170
7175
7180
7185
7190
7195
7200
7205
7210
7215
7220
7225
7230
7235
7240
7245
7250
7255
7260
7265
7270
7275
7280
7285
7290
7295
7300
7305
7310
7315
7320
7325
7330
7335
7340
7345
7350
7355
7360
7365
7370
7375
7380
7385
7390
7395
7400
7405
7410
7415
7420
7425
7430
7435
7440
7445
7450
7455
7460
7465
7470
7475
7480
7485
7490
7495
7500
7505
7510
7515
7520
7525
7530
7535
7540
7545
7550
7555
7560
7565
7570
7575
7580
7585
7590
7595
7600
7605
7610
7615
7620
7625
7630
7635
7640
7645
7650
7655
7660
7665
7670
7675
7680
7685
7690
7695
7700
7705
7710
7715
7720
7725
7730
7735
7740
7745
7750
7755
7760
7765
7770
7775
7780
7785
7790
7795
7800
7805
7810
7815
7820
7825
7830
7835
7840
7845
7850
7855
7860
7865
7870
7875
7880
7885
7890
7895
7900
7905
7910
7915
7920
7925
7930
7935
7940
7945
7950
7955
7960
7965
7970
7975
7980
7985
7990
7995
8000
8005
8010
8015
8020
8025
8030
8035
8040
8045
8050
8055
8060
8065
8070
8075
8080
8085
8090
8095
8100
8105
8110
8115
8120
8125
8130
8135
8140
8145
8150
8155
8160
8165
8170
8175
8180
8185
8190
8195
8200
8205
8210
8215
8220
8225
8230
8235
8240
8245
8250
8255
8260
8265
8270
8275
8280
8285
8290
8295
8300
8305
8310
8315
8320
8325
8330
8335
8340
8345
8350
8355
8360
8365
8370
8375
8380
8385
8390
8395
8400
8405
8410
8415
8420
8425
8430
8435
8440
8445
8450
8455
8460
8465
8470
8475
8480
8485
8490
8495
8500
8505
8510
8515
8520
8525
8530
8535
8540
8545
8550
8555
8560
8565
8570
8575
8580
8585
8590
8595
8600
8605
8610
8615
8620
8625
8630
8635
8640
8645
8650
8655
8660
8665
8670
8675
8680
8685
8690
8695
8700
8705
8710
8715
8720
8725
8730
8735
8740
8745
8750
8755
8760
8765
8770
8775
8780
8785
8790
8795
8800
8805
8810
8815
8820
8825
8830
8835
8840
8845
8850
8855
8860
8865
8870
8875
8880
8885
8890
8895
8900
8905
8910
8915
8920
8925
8930
8935
8940
8945
8950
8955
8960
8965
8970
8975
8980
8985
8990
8995
9000
9005
9010
9015
9020
9025
9030
9035
9040
9045
9050
9055
9060
9065
9070
9075
9080
9085
9090
9095
9100
9105
9110
9115
9120
9125
9130
9135
9140
9145
9150
9155
9160
9165
9170
9175
9180
9185
9190
9195
9200
9205
9210
9215
9220
9225
9230
9235
9240
9245
9250
9255
9260
9265
9270
9275
9280
9285
9290
9295
9300
9305
9310
9315
9320
9325
9330
9335
9340
9345
9350
9355
9360
9365
9370
9375
9380
9385
9390
9395
9400
9405
9410
9415

5

In another alternative embodiment, a central computer having a library of cap images and visor images allows caps and visors to be independently selected, combined by the computer into a single image, and then displayed on the customer's computer monitor. When the customer selects the desired combination, the system accepts the approved customer specifications and issues the appropriate fabrication order to the manufacturer or reseller.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 illustrates a prior art catalog page having multiple hats that illustrate possible combinations of caps and visors.

10 Figure 2 illustrates a preferred embodiment of the catalog page from template system in which unique cap styles are arranged on the catalog page.

Figure 3 illustrates a preferred embodiment of the template with visor images arranged around the edge of the template.

15 Figure 4 illustrates a preferred embodiment of the template with visor images arranged around the edge of the template and the outer edges of the visor images trimmed such that the visor is located at the edge of the template.

Figure 5 illustrates a preferred embodiment of a transparent template with visor images arranged across the entire surface of the template.

Figure 6 is another preferred embodiment which illustrates the use of a linear slide rule to display combinations of caps and visors.

Figure 7 is yet another preferred embodiment in which illustrates the use of a circular slidable to display combinations of caps and visors.

5 Figure 8 is another preferred embodiment in which the template system is implemented by computer software.

Figure 9 is a preferred embodiment which illustrates the proper positioning of the cap and relation to the visor when used with the template system.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Prior to a detailed discussion of the figures, the general overview of the template system disclosed herein will be provided. The template system is an improvement to conventional catalog systems in which a limited number of combinations of caps and visors are shown, and which allow the purchaser to make other combinations which the catalog does not show. The most important feature of the template catalog is its ability to let the customer actually see a completed hat, which can be fabricated from any combination of cap and visor, before it's ordered. The template system is unique because it allows the user to move every type and color of visor to any cap, thereby providing a clear picture of every combination that is available. The template system provides the user the ability to create and see not only every available color combination, but also to see every fabric combination that is available.

In a conventional catalog, the need to show multiple combinations means that the image of a particular type of cap or visor may be reproduced many times. As a result, a conventional catalog tends to be voluminous, which results in high production costs and substantial inconvenience to the user due to catalog bulk. In contrast, the template system
5 shows a particular type of cap or visor only once. This provides a substantial reduction in the size of the catalog while maintaining its ability to show not only all of the combinations displayed by a conventional catalog, but also to show combinations which do not appear in the conventional catalog. This reduces the cost of production of the catalog, and substantially improves its ease-of-use. The template system provides the
10 purchaser the ability to create and see any color and fabric combination in a convenient manner which greatly reduces the time needed to select a hat combination, and greatly increases the convenience of use to the purchaser. As a result, the template system is a selling tool which increases sales by making it easier for a purchaser to select an item, and which increases sales cost by reducing the amount of time needed by a purchaser to select an item. Headwear products, as with all other products, if a purchaser can see the product, the purchaser is more likely to make a better informed buying decision. This will result in faster sales, reduced returns, and repeat sales.

In practice, a purchaser will first review the pages holding cap images until the most desirable cap style and materials are found. Then, the purchaser moves the visor template over the selected caps to see which is the most desirable combination for them.
20 For ease of ordering, the order number for each cap style is displayed with its image on the page. Likewise, the order number for each visor style is displayed with its image on the template. As a result, when the desired combination is found, the order numbers are conveniently available to complete the order process.

In the preferred embodiment, the template sheets and the cap image pages are substantially the same size. However, this is not important to implement the template system invention. For example, multiple worlds of caps can be displayed on a single page while visors can be displayed in narrow strips holding a single row of visors. The 5 visor template must merely be movable in relation to the cap image page to implement the invention. In the case where the template is not transparent, the visor template would typically have the visors arranged around the periphery of the template. In this situation, the hat image produced by aligning the template with the cap image page will be improved if the edge of the template visor is cut out such that the edge of the visor which 10 comes in contact with the edge of the cap is on the edge of the template. Of course, if the template sheet is transparent, then the visor images can be located anywhere on the template, and the template can be conveniently made from a rectangular sheet.

Is also possible, instead of using mere images of the caps and visors, to use actual samples of the fabrics or materials used to produce the hats. The actual materials will of course be a little more cumbersome than images, but they provide a purchaser with a 15 more complete understanding of the product they are buying.

Alternatively, the visor template and the cap image page can be replaced with the slide rule device which is more convenient to use than a catalog, but has a reduced number of possible combinations. When mechanical slide rule devices are used, one 20 segment contains cap images, while the second segment contains visor images. These segments are slidably joined so that the visor and cap images are slidably moved in relation to one another and automatically align with one another as they pass one another. The slide rule device can take any convenient slide rule form. For example, it can take the form of a bar shape as was historically used for mathematical slide rules, or it can be 25 created as a circular slide rule in which an inner wheel rotates in front of an outer wheel.

Typically, the components of the slide rule are permanently attached to one another. This has a disadvantage in that there are a limited number of cap and visor styles which may conveniently fit on the slide rule. Of course, if the components of the slide rule were separable, then template components or cap image components could be substituted to provide an expanded number of potential combinations. The template system, discussed above, is not limited because there is no limit on the number of cap image pages or visor templates. Be that as it may, for certain applications, the slide rule display may be perfectly adequate. For example, when selling hats related to sports teams, there are typically a limited number of colors and styles which are related to a limited number of teams. In this situation, it is possible that all of the available combinations can be shown on a slide rule.

The mechanical template system, discussed above, can also be implemented in software with the results displayed on a computer terminal. The advantage of using the template system in conjunction with computer software, as opposed to using computer software to merely display a conventional catalog, is that display of items from a conventional catalog can be very time and resource intensive. This is due to the amount of data that must be transferred from a server computer to an individual's computer when the individual is seeking to execute an e-commerce transaction, such as it is commonly done via the Internet. The template system allows the user to reduce data flow by sending data related to a particular cap style to the user's computer only once. Likewise, data related to a particular visor style is also transferred only once. This substantially increases the speed of an e-commerce transaction for this type of selection process, and avoids the situation where the user terminates the purchase due to frustration caused by slow computer performance.

Another advantage provided by the template system is that it is easier to update a catalog when changes are made to available inventory. In prior art catalogs, the addition of a new item or the deletion of an old item would require reprinting the entire catalog. This not only engendered unnecessary printing costs, but it also maximized shipping costs
5 for shipping the new catalogs to vendors or customers. The template system reduces the impact of changes by requiring only replacement of changed pages or templates. This reduces both printing and shipping costs.

As a result of using the template system, several advantages are provided. First, convenience is provided to the purchaser by allowing the purchaser to rapidly and easily locate the most desirable cap and visor styles. Second, sales efficiency is increased by reducing the amount of time required for the purchaser to make a selection. Third, updates to the catalog are greatly reduced in cost by requiring only replacement of the changed portions of the catalog. Fourth, alternative catalog structures can be used, such as slide rule devices, which would not be possible without the template system. Fifth, e-commerce sales can be made more convenient by reducing the amount of data that has to be transferred. We turn now to a more detailed discussion of the figures.
10
15

Referring to Figure 1, this figure shows a typical prior art catalog page 1. The catalog page 1 will hold a plurality of hat images 2 and the style numbers 3 associated with each hat image 2. Each hat 2 is displayed as a complete unit having a cap 5 and a visor 4. Typically, each hat 2 would display a unique combination of cap 5 and visor 4 styles. Typically, the pages of the catalog will be organized by types of hats 2. For example, several pages may be devoted to hats 2 fabricated from cotton twill, several pages may be devoted to hats 2 made from oil/wax cotton, several pages may be devoted to hats 2 made from Chino cotton twill, etc. As a result, not only can duplicate images
20

appear for the same types of fabrics, duplicate images may also appear for caps 2 which have the identical color and appearance but are made from different fabrics.

This redundancy creates a substantial drawback for prior art catalogs because, if the catalog shows every possible combination of caps 5 and visors 4, then the size of the catalog can become voluminous. In addition, depending on the number of combinations which the publisher chooses to include, a particular style of cap 5 or a particular style of visor 4 may show up many times in the catalog. This redundancy greatly increases the size of the catalog, thereby adding to its cost of production, increasing the time and inconvenience it takes for a purchaser to examine its contents. Likewise, a change related to a single hat 2, such as the deletion of an existing hat 2 style or the addition of a new hat 2 style, would require that the entire catalog be replaced. Since catalogs are typically printed on a set schedule, changes to a product line may not effectively be conveyed to vendors or the public in a timely fashion.

As will be shown below, in regard to the template system, each cap 5 style and visor 4 style only needs to be included a single time within the catalog. This will greatly reduce the size of the catalog, making it more convenient to handle. In addition, the cost of production will be reduced, and sales time will be reduced because the purchaser can examine the catalog in a reduced amount of time.

In figure 2, a preferred embodiment of catalog page 1 modified for the template system is shown. In this figure, the visors 4 have been eliminated. In addition, each cap 5 style appears only once, which eliminates any redundancy. As a result, the number of pages required for a large selection of hats 2 is greatly reduced.

Those skilled in the art will recognize that the visors 4 may optionally remain on the catalog page 1. For example, the catalog page 1 may illustrate caps 5 and visors 4 which have the same color and fabric. In that case, the purchaser may see what a single fabric hat 2 would look like without the need to use the template (shown below in regard to figure 3). When the template is used, the visors 4 on the template would conceal the visors 4 on the catalog page and allow the purchaser to view the cap 5 with a different visor 4.

Figure 3 illustrates a preferred embodiment of the template 6 used in conjunction with the modified catalog page 1 (discussed above in regard to figure 2) . In this template, the periphery of the template 6 as a plurality of visors 4. Each of visors 4 is unique in regard to the other visors 4. When a purchaser is deciding which cap 5 and visor 4 combination to select, the purchaser aligns the edge of the template 6 with the cap 5 images on the modified catalog page 1. Once the purchaser has determined which cap or caps 5 are desired, then the template 6 can be aligned with the caps 5 and moved such that the cap 5 can be aligned with as many visors 4 as the purchaser desires. As a result of using this template 6, many more cap 5 and visor 6 combinations can be shown than would be possible with a conventional catalog page. For example, using a mere 215 caps 5 in combination with only 180 visors 4 creates a total of 38,700 unique combinations of caps 5 and visors 4 can be shown with approximately sixteen catalog pages 1 and ten templates 6. Of course, the number of visors 4 placed on the template 6 and the number of caps 5 placed on the catalog page 1 can vary. Therefore, the number of possible combinations can vary. In contrast, to display the same number of combinations in a conventional catalog system would require 774 pages with 50 hats per page. If the pictures of caps were as large as what is possible to show in sixteen catalog pages 1 and ten templates 6, then the conventional catalog would require 1,935 pages. As can be seen, the template system provided herein has a drastic effect on the cost of producing

catalogs. In addition, it provides a system which is much easier for a consumer to use, and a system which allows a consumer to much more rapidly determine which cap 5 and visor 4 combination is the most desirable for that consumer.

Those skilled in the art will recognize that the reason for arranging the visors 4 around the periphery of the template 6 would be because the template 6 is not transparent.

Figure 4 is another preferred embodiment of the template 6. This embodiment differs from the embodiment of figure 3 in that the edge of the template 6 is trimmed such that the edge 7 follows the outer edge of the visor 4 at the edge of the template 6. This permits the visor 4 to more precisely aligned with the cap 5 on the catalog page 1.

Figure 5 is another preferred embodiment of the template 6. It in this embodiment, the template 6 is fabricated from transparent material which will allow the catalog page 1 and the caps 5 to be seen through the template 6 when the template 6 is placed on top of the catalog page 1. This embodiment has several advantages. First, the visor 4 images do not have to be carefully aligned with the edges of template 6 when produced. Second, the edges of the template 6 do not have to be trimmed as they were in figure 4. Third, since the visor 4 images do not have to be located on the edges of the template 6, the entire area available on template 6 can be used to display visor 4 images. This allows a substantial increase in the number of possible combinations that can be made using a single template 6.

Those skilled in the art will recognize that any suitable material can be made to fabricate template 6. The only requirement is that the material be sufficiently transparent to allow the caps 5 on the catalog page 1 to be clearly seen through the template 6.

In figure 6, an alternative preferred embodiment is shown. This embodiment uses a mechanical slide rule structure to combine cap 5 styles with a variety of visor 4 styles. In this embodiment the slide rule 8 has a plurality of caps 5 in fixed locations on the base 9 of the slide rule 8. A sliding member 11 moves horizontally along track 10. Each visor 5 can be moved to align with any cap 5. Those skilled in the art will recognize that the number of caps 5 and visors 4 will be controlled by the length of the slide rule 8 and the size of the caps 5 and the visors 4 in relation to the slide rule 8. Of course, the catalog based template system described above can hold more possible combinations. However, the slide rule display can be very useful for promotional items which do not carry a large 10 number of combinations (e.g. the limited number of sports team combinations discussed above).

Regarding figure 7, this figure is another alternative preferred embodiment which uses a circular slide rule to display combinations of caps 5 and visors 4. In this embodiment, a rear disk 12 has a number of caps 5 arranged around its periphery. A front disk 13 is rotatably attached to a rear disk 12 at that pivot point 14. As the front disk 13 is rotated in relation to the rear disk 12, the visors 4 on the front disk 13 are moved from one cap 5 to another on the rear disk 12. As can be seen from this figure, it is not necessary to have an equal number of visors 4 and caps 5. As was the case above, in regard to be linear slide rule, this slide rule would carry a limited number of 20 combinations, but it may be very useful for promotional or special-interest lines of hats, etc. As was the case with previous embodiments, the style numbers for the caps 5 and visors 4 are conveniently located on the disks 12 and 13.

Those skilled in the art will recognize that it is possible to build a slide rule in which the rear disk 12 and the front disk 13 can be disengaged and combined with other 25 disks having other caps 5 or visors 4.

Regarding figure 8, this figure illustrates a preferred embodiment of the template system in which a programmable computer is used to display the caps 5 and visors 4. In this embodiment, a computer first opens a cap 5 database at step 32, and opens a visor 4 database at step 33. The user browses through images of caps 5 which are displayed on the computer's display screen and selects a cap 5 style at step 34. Once the cap 5 style is selected, the user then browses through images of visors 4 and selects a visor 4 style at step 35. At step 36, the computer displays a combined image of this selected cap 510 visor 4 which shows how the resulting hat would look. If the user determines, at step 37, that the combination is okay, then the computer would proceed to obtain order information at step 40 by known means. On the other hand, if the cap 5 and visor 4 combination is not found to be acceptable at step 37, then the computer queries the user, at step 38, to determine if the visor 4 is acceptable. If the visor 4 is not acceptable, then the computer returns to step 35 and repeats the visor 4 selection process. If the visor 4 is acceptable, then the computer queries the user to select a new cap 5 style. Once an acceptable cap 5 is found, then the system proceeds to obtain order information at step 40.

Figure 9 illustrates the proper positioning to the cap 5 in relation to the visor 4. To best display the combination of a cap 5 and a visor 4, it has been found that if the edge of the cap 5 and visor 4, as illustrated by the line which extends between point 42 and point 43, are photographed from an angle such that it is substantially flat, then the visors 4 on the edge of the template will align properly across the entire line and provide the best possible display of a cap 5 and visor 4 combination. Of course, this visual technique will also work with embodiments such as the slide rule embodiment or the computer display embodiment.

5

The foregoing embodiments have all shown the template system used in conjunction with hats 2. In particular, the use of a plurality of first images, namely caps 2, is in conjunction with a plurality of second images, namely visors 4. When the caps 2 and the visors 4 are displayed together, they form a complete object, namely a hat 2.

However, those skilled in the art will recognize that the template system disclosed herein can be used in relation to a variety of other objects in which first and second images can be changed in relation to one another, such as garments (e.g. ties and shirts), etc.

10

While the invention has been described with respect to a preferred embodiment thereof, it will be understood by those skilled in the art that various changes in detail may be made therein without departing from the spirit, scope, and teaching of the invention. For example, the number of caps on the page can vary, the number of visors on a template can vary, the material used constructed the template can vary, the size and shape of the template can vary, the slide rule can vary in shape and or size, etc. Accordingly, the invention herein disclosed is to be limited only as specified in the following claims.

I claim: